

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 030125PC	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/SE2004/001019	International filing date ( <i>day/month/year</i> ) 23 June 2004 (23.06.2004)	Priority date ( <i>day/month/year</i> ) 27 June 2003 (27.06.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SANDVIK INTELLECTUAL PROPERTY AB		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
  2. This REPORT consists of a total of 4 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 740 14 35	Date of issuance of this report 03 January 2006 (03.01.2006)  Authorized officer  <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Philippe Becamel</div>  Telephone No. +41 22 338 70 90
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# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year) <span style="float: right;">21-09-2004</span>	
Applicant's or agent's file reference 030125PC	<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. PCT/SE 2004/001019	International filing date (day/month/year) 23.06.2004
Priority date (day/month/year) 27.06.2003	
International Patent Classification (IPC) or both national classification and IPC F27D 11/02, H05B 3/66	
Applicant SANDVIK AB et al	

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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Form PCT/ISA/237 (cover sheet) (January 2004)

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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/SE 2004/001019

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/SE 2004/001019

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	4, 7, 9-11	YES
	Claims	1-3, 5-6, 8	NO
Inventive step (IS)	Claims	4, 7	YES
	Claims	1-3, 5-6, 8-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

2. Citations and explanations:

Document considered to be of particular relevance:  
D1: US 2888546

The object of the invention is to provide a ceramic heat conductor support disc for supporting a heating element for a heating furnace. In order to minimise the tendency to break due to thermal stresses, elongated openings are arranged in the disc.

D1 (figure 5, column 2, lines 49-55; column 3, lines 16-21; claim 1) discloses a support disc (ceramic block 42), a centre aperture (46), and one or more apertures (44) located between the centre aperture (46) and the periphery of the disc (42). The disc is provided with elongated openings (45) running from the periphery of the disc (42) to said apertures (44) penetrating the whole thickness of said disc (42). Consequently, claim 1 lacks novelty.

Claims 2-3, 5-6 and 8 also lack novelty in regard to D1 (citations as above).

The devices of claims 9-11 are considered to be obvious to person skilled in the art in regard to D1.

The discs defined by claims 4 and 7 are novel in regard to D1. The differences represent different solutions to problems caused by thermal stresses in the disc. The problem of thermal stress is not discussed or solved in D1. It is not considered to be obvious to a person skilled in the art who has knowledge of D1 to modify the construction of the disc in the manner defined by any of claims 4 and 7. Therefore, claims 4 and 7 are considered to involve an inventive step.